

## ABSTRACT

A mobile station apparatus enabling increases in communication system capacity when uplink high-speed packet communication is performed and the like. The mobile station having a plurality of antennas, antenna 1 and antenna 2, compares the reception power of a signal  $r_{21}$  received in antenna 1 with the reception power of a signal  $r_{22}$  received in antenna 2 among signals transmitted from base station 2 of an adjacent cell, selects antenna 1 as a transmission antenna when "the reception power of  $r_{21}$  < the reception power of  $r_{22}$ ", while selecting antenna 2 as a transmission antenna when "the reception power of  $r_{21}$   $\geq$  the reception power of  $r_{22}$ ", transmits an uplink signal to base station 1 from the selected antenna, and reduces interference caused in base station 2 of the adjacent cell.